

| APPLICABLE STANDARD                                                                                                         |                             |                                                                                                           |                                                                                                                            |                                |                  |
|-----------------------------------------------------------------------------------------------------------------------------|-----------------------------|-----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------|
| RATING                                                                                                                      | OPERATING TEMPERATURE RANGE | -55 °C TO 85 °C                                                                                           | STORAGE TEMPERATURE RANGE                                                                                                  | -10 °C TO 60 °C <sup>(3)</sup> |                  |
|                                                                                                                             | VOLTAGE                     | 100 V AC                                                                                                  | OPERATING HUMIDITY RANGE                                                                                                   | 40 % TO 80 %                   |                  |
|                                                                                                                             | CURRENT                     | 0.4 A                                                                                                     | STORAGE HUMIDITY RANGE                                                                                                     | 40 % TO 70 % <sup>(3)</sup>    |                  |
| SPECIFICATIONS                                                                                                              |                             |                                                                                                           |                                                                                                                            |                                |                  |
| ITEM                                                                                                                        |                             | TEST METHOD                                                                                               | REQUIREMENTS                                                                                                               | QT                             | AT               |
| CONSTRUCTION                                                                                                                |                             |                                                                                                           |                                                                                                                            |                                |                  |
| GENERAL EXAMINATION                                                                                                         |                             | VISUALLY AND BY MEASURING INSTRUMENT.                                                                     | ACCORDING TO DRAWING.                                                                                                      | x                              | x                |
| MARKING                                                                                                                     |                             | CONFIRMED VISUALLY.                                                                                       |                                                                                                                            | x                              | x                |
| ELECTRIC CHARACTERISTICS                                                                                                    |                             |                                                                                                           |                                                                                                                            |                                |                  |
| CONTACT RESISTANCE                                                                                                          |                             | 100 mA (DC OR 1000 Hz).                                                                                   | 80 mΩ MAX. <sup>(1)</sup>                                                                                                  | x                              | —                |
| CONTACT RESISTANCE MILLIVOLT LEVEL METHOD                                                                                   |                             | 20 mV MAX, 1 mA(DC OR 1000Hz)                                                                             | 100 mΩ MAX. <sup>(2)</sup>                                                                                                 | x                              | —                |
| INSULATION RESISTANCE                                                                                                       |                             | 250 V DC.                                                                                                 | 100 MΩ MIN.                                                                                                                | x                              | —                |
| VOLTAGE PROOF                                                                                                               |                             | 300 V AC FOR 1 min.                                                                                       | NO FLASHOVER OR BREAKDOWN.                                                                                                 | x                              | —                |
| MECHANICAL CHARACTERISTICS                                                                                                  |                             |                                                                                                           |                                                                                                                            |                                |                  |
| INSERTION AND WITHDRAWAL FORCE                                                                                              |                             | MEASURED BY APPLICABLE CONNECTOR.                                                                         | INSERTION FORCE: 98 N MAX.<br>WITHDRAWAL FORCE: 9.1 N MIN.                                                                 | x                              | —                |
| MECHANICAL OPERATION                                                                                                        |                             | 50 TIMES INSERTIONS AND EXTRACTIONS.                                                                      | ① CONTACT RESISTANCE: 100 mΩ MAX. <sup>(2)</sup><br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.                             | x                              | —                |
| VIBRATION                                                                                                                   |                             | FREQUENCY 10 TO 55 Hz,<br>AMPLITUDE : 1.5 mm,<br>AT 2 h FOR 3 DIRECTION.                                  | ① NO ELECTRICAL DISCONTINUITY OF 1 μs.<br>② CONTACT RESISTANCE: 100 mΩ MAX. <sup>(2)</sup>                                 | x                              | —                |
| SHOCK                                                                                                                       |                             | 490 m/s <sup>2</sup> , DURATION OF PULSE 11 ms<br>AT 3 TIMES FOR 3 DIRECTIONS.                            | ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.                                                                                 | x                              | —                |
| ENVIRONMENTAL CHARACTERISTICS                                                                                               |                             |                                                                                                           |                                                                                                                            |                                |                  |
| DAMP HEAT (STEADY STATE)                                                                                                    |                             | EXPOSED AT 40±2 °C, 90 ~ 95 %, 96 h.                                                                      | ① CONTACT RESISTANCE: 100 mΩ MAX. <sup>(2)</sup><br>② INSULATION RESISTANCE: 100 MΩ MIN.                                   | x                              | —                |
| RAPID CHANGE OF TEMPERATURE                                                                                                 |                             | TEMPERATURE-55→+15~+35→+85→+15~+35°C<br>TIME 30 → 2~3 → 30 → 2~3 min<br>UNDER 5 CYCLES.                   | ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.                                                                                 | x                              | —                |
| CORROSION SALT MIST                                                                                                         |                             | EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h.                                                                 | ① CONTACT RESISTANCE: 100 mΩ MAX. <sup>(2)</sup><br>② NO DEFECT SUCH AS CORROSION WHICH IMPAIRS THE FUNCTION OF CONNECTOR. | x                              | —                |
| HYDROGEN SULPHIDE                                                                                                           |                             | EXPOSED IN 3 PPM FOR 96 h.<br>(TEST STANDARD: JEIDA-38)                                                   |                                                                                                                            | x                              | —                |
| RESISTANCE TO SOLDERING HEAT                                                                                                |                             | 1) REFLOW SOLDERING : 250 °C MAX,<br>: 220 °C MIN,<br>FOR 60 s<br>2) SOLDERING IRONS : 360 °C,<br>FOR 5 s | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.                                                            | x                              | —                |
| SOLDERABILITY                                                                                                               |                             | SOLDERED AT SOLDER TEMPERATURE, 240 ± 3°C,<br>FOR IMMERSION DURATION, 3 s.                                | A NEW UNIFORM COATING OF SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMERSED.                               | x                              | —                |
|                                                                                                                             |                             |                                                                                                           |                                                                                                                            |                                |                  |
|                                                                                                                             | COUNT                       | DESCRIPTION OF REVISIONS                                                                                  | DESIGNED                                                                                                                   | CHECKED                        | DATE             |
|                                                                                                                             |                             |                                                                                                           |                                                                                                                            |                                |                  |
| REMARK                                                                                                                      |                             |                                                                                                           | APPROVED                                                                                                                   | NH. NAKATA                     | 18.02.28         |
| (1)THIS CONNECTOR'S INITIAL CONTACT RESISTANCE SHALL BE 80 mΩ,BECAUSE OF THE BULK RESISTANCE OF STACKING HEIGHT 16 mm TYPE. |                             |                                                                                                           | CHECKED                                                                                                                    | HT. YAMAGUCHI                  | 18.02.28         |
| (2)AFTER TEST, THE CHANCE OF THE CONTACT RESISTANCE SHALL BE 20 mΩ MAX.                                                     |                             |                                                                                                           | DESIGNED                                                                                                                   | TY. EDAGAWA                    | 18.02.28         |
| (3)THIS STORAGE INDICATES A LONG-TERM STORAGE STATE FOR THE UNUSED PRODUCT BEFORE THE BOARD MOUNTED.                        |                             |                                                                                                           | DRAWN                                                                                                                      | MK. INOUE                      | 18.02.23         |
| Unless otherwise specified, refer to JIS C 5402.                                                                            |                             |                                                                                                           |                                                                                                                            |                                |                  |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test                                                              |                             |                                                                                                           | DRAWING NO.                                                                                                                |                                | ELC-150885-68-00 |
|                                                                                                                             | SPECIFICATION SHEET         |                                                                                                           | PART NO.                                                                                                                   | FX8C-140S-SV (68)              |                  |
|                                                                                                                             | HIROSE ELECTRIC CO., LTD.   |                                                                                                           | CODE NO.                                                                                                                   | CL578-0807-9-68                | 1/1              |